



DEPARTMENT OF THE NAVY

NAVAL WEAPONS STATION YORKTOWN
P.O. DRAWER 160
YORKTOWN, VA 23691-0160

WPNSTA YORKTOWNINST 11450.1 CH-1
Safety
5 Aug 03

NAVAL WEAPONS STATION YORKTOWN INSTRUCTION 11450.1
CHANGE TRANSMITTAL 1

From: Commanding Officer, Naval Weapons Station Yorktown

Subj: WPNSTA YORKTOWN NAVY WEIGHT HANDLING EQUIPMENT (WHE)
PROGRAM

1. Purpose. To issue a change to the WPNSTA Yorktown Navy Weight Handling Equipment (WHE) Program instruction.
2. Action. Delete paragraph 10c on page 6.
3. Cancellation. This change transmittal is cancelled after appropriate action has been taken.


K. L. SKUDIN

Distribution:
List I, II, III (Case A)



DEPARTMENT OF THE NAVY

NAVAL WEAPONS STATION YORKTOWN
P.O. DRAWER 160
YORKTOWN, VA 23691-0160

WPNSTA YORKTOWNINST 11450.1
Safety

JUL 02 2002

WPNSTA YORKTOWN INSTRUCTION 11450.1

Subj: WPNSTA YORKTOWN NAVY WEIGHT HANDLING EQUIPMENT (WHE)
PROGRAM

Ref: (a) SECNAVINST 11260.2, Navy Weight Handling Program for
Shore Activities
(b) NAVFAC P-307, Management of Weight Handling Equipment
(c) OPNAVINST 5100.23E, Navy Occupational Safety and
Health Manual
(d) OPNAVINST 5102.1C, Mishap Investigation and Reporting
Manual Handling and Safety Manual
(e) NAVSTA NORFOLK VA/PM PORT OPS 161500Z Nov 99,
Regional Pier Access for Cranes
(f) NAVSEA OP-5, Vol 1, Rev 7, Ammunition and Explosives
Ashore Safety Regulations for Handling, Storing,
Production, Renovation and Shipping

Encl: (1) NAVFAC P-307, Section 13, Training and Qualification

1. Purpose.

a. To establish and maintain a safe and effective Weight Handling Program at Naval Weapons Station (WPNSTA) Yorktown in accordance with references (a) through (f).

b. To define the responsibilities of key WPNSTA Yorktown personnel in support of the Navy Weight Handling Program for local shore activities.

c. To define the responsibilities of Public Works Center (PWC) Norfolk personnel in support of the Navy Weight Handling Program.

2. Cancellation: This instruction supercedes WPNSTA YORKTOWNINST 11450

3. Applicability and Scope. The responsibilities assigned by this instruction apply to weight handling functions at WPNSTA Yorktown. Equipment governed by this instruction include the operation of Category (CAT) 1, 2, 3, and 4 cranes, crane rigging

JUL 02 2002

gear, and miscellaneous lifting equipment.

4. Discussion. Safe and reliable weight handling equipment (WHE) is critical to the operation of WPNSTA Yorktown and the Navy. WPNSTA Yorktown uses a variety of WHE. Safe conduct of these operations is key to precluding personnel injury or damage to equipment. All WHE must be properly operated, maintained, inspected, tested, and certified per reference (b). Personnel involved in the WHE program must be properly trained and qualified.

5. Definitions.

a. Weight Handling Equipment (WHE). Consists of, but is not limited to, cranes (e.g., portal cranes, mobile cranes, bridge cranes, monorails, and hoists), rigging gear (e.g., slings, shackles) and associated equipment (e.g., chainfalls, dynamometers).

b. Categories of WHE. Generally, WPNSTA Yorktown WHE may be categorized as follows:

(1) CAT 1 - mobile cranes, portal cranes, and floating cranes (YD).

(2) CAT 2 - overhead traveling cranes, jibs, and monorails with a capacity of 20,000 pounds and greater.

(3) CAT 3 - overhead hoists, jibs, and monorails with a capacity less than 20,000 pounds.

(4) CAT 4 - Truck-mounted cranes.

c. Certification. The process by which, on a periodic basis, WHE is inspected, weight-tested, and approved for use.

d. Complex Lifts. Lifts involving restricted maneuverability areas, high-dollar items in excess of \$100,000, blind areas, or any lift over 80 percent of the crane's rated capacity. All complex lifts require a Complex Lift Request to be approved by the WHE Program Manager, and a safety observer (normally provided by the Peninsula Storefront for Safety and Occupational Health). Examples of complex lifts are:

(1) Large and irregular shapes (i.e., engines, engines in cans and vehicles),

JUL 02 2002

- (2) Non-routine lifts,
- (3) Sensitive equipment, and
- (4) Unusual safety risks.

e. Routine Lifts. Ordinary in nature and do not require supervisory oversight. Routine lifts are categorized as follows:

(1) Engineered Lifts. Lifts in which an approved rigging configuration has been developed, tested and fully documented by an engineering activity (e.g. Design Agent, Technical Design Agent, In-Service Engineering Agent, Component Field Activity, etc.) in an official publication (e.g. Ordnance Pamphlet, Technical Manual, WR, etc.), or lifts in which the specific rigging configuration has been developed and fully documented in a local procedure approved by the WHE Program Manager.

(2) Non-engineered Lifts. Lifts which involve rigging not specifically documented as an engineered lift.

6. Responsibilities

a. The Commanding Officer, WPNSTA Yorktown has overall responsibility for ensuring WHE safety and program compliance within the activity. The Commanding Officer shall designate, in writing, a WHE Program Manager.

b. All tenants may create local SOPs specific to their environment. All SOPs involving the use of WHE will be reviewed by the Peninsula Storefront for Safety and Occupational Health and be approved by the designated WPNSTA Yorktown WHE Program Manager. Tenants are also responsible for maintaining a current copy of reference (b).

c. The WHE Program Manager is responsible to the Commanding Officer, WPNSTA Yorktown for the overall management, administration, and record keeping of the WHE Program at WPNSTA Yorktown. The WHE Program Manager shall be WPNSTA Yorktown's liaison on all matters pertaining to the WHE Program. The Public Works Officer or his/her direct representative shall be assigned as the WHE Program Manager.

d. The Certifying Official is responsible to the Commanding Officer for ensuring all WHE is inspected, tested, and safe to

JUL 02 2002

use for its intended purpose. The Commanding Officer, Navy Public Works Center (PWC), Norfolk/Regional Engineer, has been designated by the Commander, Navy Region Mid-Atlantic (CNRMA) as the region's WHE Certifying Official. In turn, this responsibility is delegated to the Director, Certification Management Division, Facility Management Department, PWC, Norfolk.

e. The Tenant Command WHE Representative is responsible to the Program Manager for ensuring WHE Program compliance within the tenant command.

f. Tenant Commanders or Directors will be the final authority for all qualifications obtained within their command. Per reference (b), tenants will ensure that WHE utilized within their facility has had an Operator Daily Checklist (ODCL) examination performed prior to every use. Any ODCL discrepancies should be reported to PWC for resolution. Copies of all ODCLs for each unit of WHE maintained by PWC Norfolk shall be provided by tenants to PWC Norfolk, at least monthly, for inclusion in the Equipment History File.

g. All tenants will ensure personnel are properly trained on WHE and appropriate precautions are taken in preparation for inclement weather per Equipment Operator's Manual (EOM) and reference (b). Inclement weather precautions shall be posted inside the operator's cab on CAT 1 cranes: Do not operate with winds above 25 knots and/or during severe lightning conditions.

h. WHE operators shall be properly trained and licensed, and shall perform their duties in accordance with reference (b), Appendix N.

i. WHE Rigger and Rigger-in-Charge (signalman) shall be trained and qualified per reference (b), Appendix N.

7. Program Oversight.

a. Director, Navy Crane Center (NCC) is responsible for the management and oversight of the Navy WHE Program. Reference (a) requires NCC to conduct audits of the WHE Program on a periodic basis. Reference (a) requires each activity to perform a self-assessment of their program to identify potential problem areas and deficiencies to be resolved, prior to the audit. NCC provides a checklist to aid the activity in assessing the program.

JUL 02 2002

b. The Safety Manager, Peninsula Storefront for Safety and Occupational Health shall provide oversight of the safety aspects of the WHE Program including safety inspections, evaluations, assessments, audits, risk assessments, mishap investigations, and crane accident investigations per reference (b).

c. When directed by the NCC prior to the scheduled audit, the tenant WHE program representatives shall monitor/audit their program utilizing the NCC provided self-assessment checklist. Tenant assessments shall be maintained on file for a minimum of 1 year.

8. Equipment History File. Per reference (b), Section 5, PWC Norfolk shall establish and maintain an individual equipment history file on each unit of WHE maintained by PWC Norfolk for each tenant activity. Tenant activities are responsible for establishing and maintaining equipment history files for all units of MHE under their control, which are not maintained by PWC Norfolk. The equipment history file shall contain the documentation shown in Table 5-1 for the time period indicated. The files shall be made available to Government Oversight Agencies (e.g., OSHA, NCC) upon request.

9. Certification of WHE.

a. Per reference (c), WHE that is not under current certification shall be locked out, tagged out of service, and physically disconnected from all power sources until it is recertified. WHE shall not be returned to service prior to the signature of the certifying official, except as provided in reference (b).

b. Certification frequency. Except as noted in reference (b), a crane requires an annual certification, to include load testing.

c. Interim recertification may be required under certain circumstances, such as exceeding certified capacity during operation, or after certain maintenance actions are performed.

d. Load testing shall be performed per reference (b).

10. Inspections. PWC will perform required maintenance inspections and maintenance. Maintenance inspections shall consist of observing the function of specified components before, during, and after operations. Examinations will be

JUL 02 2002

conducted by the certifying officer and shall be by sight, sound, touch, and as necessary, instrumentation, non-destructive testing, and disassembly. Disassembly is usually limited to abnormal conditions, Original Equipment Manufacturer (OEM) intervals, or local experience when failure or malfunction indicates further inspection is necessary. The certifying official is the authority for determining extent and depth of inspection.

a. If a failure or malfunction occurs, or a deficiency is detected which has broad applicability at other activities, the NCC must be notified within 5 days. The inoperable equipment must be shut down and tagged out until restored to a safe working condition as deemed by a certifying official.

b. Annual and conditional maintenance inspection specifications are set forth in reference (b), Appendices C and D. Specification data sheets shall be used to augment the specifications to aid inspectors with guidance and technical information. PWC shall develop the specification data sheets.

c. Extension of inspection and maintenance schedules. The Commanding Officer, WPNSTA Yorktown may delegate authority to the certifying official to extend or adjust a prescribed inspection or servicing schedule when it conflicts with work schedule or results in a duplication of effort. This authority shall be in writing and filed in the Equipment History File.

11. Crane Alterations. Except as noted in reference (b), crane alterations to load-bearing parts, load-controlling parts, or operational safety devices shall be approved by the NCC. All crane alterations, whether locally or NCC-approved shall be fully documented in the Crane Equipment History File. All requests for crane ALT/MOD shall be processed via PWC, Code 410, Norfolk. Additionally, PWC, Code 410, Norfolk shall track all Crane Safety Advisories (CSA) issued by the NCC, as well as all required corrective actions.

12. Training, Qualifications, and Licensing. All personnel involved with WHE shall meet the training and qualification requirements mandated by the NCC, per reference (b), enclosure (1), and reference (b), Appendix N, Chapter 15.

a. Training contacts are PWC Transportation, Code 700, and HRO East.

b. WHE Personnel Licensing.

JUL 02 2002

(1) All personnel, except contractor personnel, who are assigned duties involving the operation of Navy shore-based CAT 1, 2, cab operated CAT 3, or CAT 4 WHE shall be qualified and licensed per reference (b).

(2) Licensed operators shall have such licenses in their possession when operating cranes.

(3) Incidental licenses. Maintenance and inspection personnel who operate WHE incidental to maintenance of the equipment shall be tested and licensed per the exceptions listed in reference (b).

(4) A license is not required for operators of non-cab operated CAT 3 WHE. However, all operators of this type equipment shall be trained in, and demonstrate adequate knowledge of, the areas identified in reference (b), Appendix N and Section 13, and applicable enclosures. Training shall be documented and maintained by the operator's command in individual training records, to be made available for review by oversight/inspection organizations.

(5) Personnel who license operators must be formally trained, certified, and designated to teach the type of equipment the trainee will be required to operate. Formal training shall be requested through an established, licensed program.

c. Requirements and Procedures for Obtaining a License. Reference (b) clearly defines the requirements that must be met for obtaining a WHE operator's license.

13. Operational Safety Procedures.

a. Reference (b), Section 10, contains specific guidelines concerning crane operational safety procedures, crane team member responsibilities, safety devices, communications, adverse operations, and other safety precautions to be observed.

b. Per reference (c), appropriate Personnel Protective Equipment (PPE) shall be worn during all lifts.

c. Engineered lifts shall be conducted with the oversight of an ordnance worker who has met all training requirements of reference (f).

JUL 02 2002

d. Non-engineered lifts must be conducted under the direction of a person trained, qualified, and classified as a rigger.

14. Investigation and Reporting of WHE Accidents. In addition to the investigation and reporting requirements of references (c) and (d), activities shall investigate and report crane accidents per reference (b), Section 12. Accident reports must be kept on file in the crane history record for 7 years. Peninsula Storefront for Safety and Occupational Health will be responsible for oversight of WHE accident investigation and reporting.

15. Requirements for General Purpose Rigging Gear, Crane Rigging Gear, and Miscellaneous Equipment.

a. Reference (b), Section 14, contains requirements for maintenance, inspection and testing of crane rigging gear, and miscellaneous lifting equipment, including:

(1) Rigging gear (e.g., slings including chain, wire rope, metal mesh, synthetic rope, synthetic webbing and synthetic roundslings, shackles, eye bolts, swivel hoist rings, links and rings, turnbuckles, etc.).

(2) Portable load indicators (e.g., dynamometers, load cells, crane scales, etc.).

(3) Portable chainfalls and hoists (except chainfalls which are designated for use at the same location on a continuing basis).

(4) Portable A-Frames, portable gantries, and portable floor cranes used for general lifting.

(5) Cranes and hoists procured with, integral to, and used solely in support of larger machine systems (milling machines, press brakes, etc.).

b. Equipment Markings. Each piece of applicable equipment or gear shall be tagged, engraved, or otherwise marked per reference (b). Markings on equipment shall include:

(1) Rated load,

(2) Reinspection due date, and

JUL 02 2004

(3) Manufacturing logo on rigging hardware.

c. Test and Inspection. Each command responsible for maintaining miscellaneous lifting equipment described in paragraph 14a above, shall establish an inspection program for applicable equipment, including initial visual inspection and load test, followed by pre-use and documented periodic visual inspections. For any unsatisfactory equipment and gear, refer to PWC for resolution. Activities may choose to send rigging gear to PWC for initial strength testing and marking.

d. Periodic inspection, load testing, repairs and alterations of applicable equipment shall be performed per reference (b), Section 14.

16. Non-Navy Owned Cranes at WPNSTA Yorktown. References (b) and (e) contain specific requirements concerning rented, leased and contractor-operated cranes. These requirements will be strictly followed. Customers and contract management personnel shall be responsible for verifying the applicable standard operating procedures and licenses to ensure WPNSTA Yorktown WHE Program compliance.

17. Special Requirements for Ordnance Operations at WPNSTA Yorktown Ammunition Terminal (Ammo Pier).

a. In accordance with reference (f), all lifting operations involving ammunition and explosives on the pier will be conducted in the presence of a Pier Safety Observer from the Peninsula Storefront for Safety and Occupational Health.

b. During the movement of the portal crane on the pier, a crane walker is required. The crane walker's responsibilities include ensuring the safe travel of the crane by observing for potential obstructions, properly aligning crane rail switches, and being in a position (on the pier) to immediately notify the operator to stop operations should a problem arise. The tenant conducting operations will provide additional personnel to support this requirement as necessary.


K. L. SKUDIN

Distribution:

List I, II, III (Case A)

JUL 02 2004

(3) Manufacturing logo on rigging hardware.

c. Test and Inspection. Each command responsible for maintaining miscellaneous lifting equipment described in paragraph 14a above, shall establish an inspection program for applicable equipment, including initial visual inspection and load test, followed by pre-use and documented periodic visual inspections. For any unsatisfactory equipment and gear, refer to PWC for resolution. Activities may choose to send rigging gear to PWC for initial strength testing and marking.

d. Periodic inspection, load testing, repairs and alterations of applicable equipment shall be performed per reference (b), Section 14.

16. Non-Navy Owned Cranes at WPNSTA Yorktown. References (b) and (e) contain specific requirements concerning rented, leased and contractor-operated cranes. These requirements will be strictly followed. Customers and contract management personnel shall be responsible for verifying the applicable standard operating procedures and licenses to ensure WPNSTA Yorktown WHE Program compliance.

17. Special Requirements for Ordnance Operations at WPNSTA Yorktown Ammunition Terminal (Ammo Pier).

a. In accordance with reference (f), all lifting operations involving ammunition and explosives on the pier will be conducted in the presence of a Pier Safety Observer from the Peninsula Storefront for Safety and Occupational Health.

b. During the movement of the portal crane on the pier, a crane walker is required. The crane walker's responsibilities include ensuring the safe travel of the crane by observing for potential obstructions, properly aligning crane rail switches, and being in a position (on the pier) to immediately notify the operator to stop operations should a problem arise. The tenant conducting operations will provide additional personnel to support this requirement as necessary.


K. L. SKUDIN

Distribution:
List I, II, III (Case A)